

Remarks

Claims 11 through 20 were presented for examination in the present application, and are presented for consideration upon entry of the instant amendment.

Claims 11-20 stand rejected under 35 U.S.C. 112, second paragraph, as indefinite. The Office Action asserts that in claim 11, lines 13 and 14, it is not clear what is encompassed by the term “hydrodynamic Föttinger converter”. In addition, the Office Action contends that it is also not clear what is encompassed by the term “TRILOK converter”. Applicant respectfully disagrees. However, claim 11 is amended to delete “hydrodynamic Föttinger converter” and “TRILOK converter” and add “torque converter” for clarification.

The present application claims priority to German Patent Application No. 10314757.8, filed March 31, 2003. Applicant respectfully submits that in German technical literature the term “Drehmomentwandler” (torque converter) and “Föttinger wandler” (Föttinger converter) are used interchangeably. For example, attached in Appendix A is an article referring to torque converters from the German version of Wikipedia. The following is a translation of the beginning section of the first paragraph thereof:

A converter, also call torque converter or Föttinger-converter, is a hydraulic device, which transfers torque between two components having different speed of rotation.

In addition, Applicant respectfully submits that in German technical literature the term “Trilok-Wandler” (trilok-converter) refers to a device showing the characteristics of a torque converter in one mode of operation and in a second mode, it functions as a hydrodynamic clutch (for higher rotational speeds on the output side). Such a torque converter with a pump, a turbine and a free-wheeling stator is disclosed by U.S. Patent No. 4,362,017, attached in Appendix

A for Examiner's convenience, that addresses the principle of operation of this type of torque converters in column 1, lines 26-28 as "Trilok".

In addition, with reference to page 267, chapter 10.3.1 of the textbook "Automotive Transmissions: Fundamentals, Selection, Design and Application", Harald Naunheimer, Bernd Bertsche, Joachim Rynborz and S. Day published by Springer-Verlag Berlin Heidelberg New York (ISBN 3-540-65903-X), the following description is a summary thereof that includes that the trilok-converter is a single-stage two-phase torque converter, which combines the advantages of hydrodynamic torque converters and hydrodynamic clutches. They are typically used for passenger cars. In the first phase of operation, a Trilok-converter operates as a hydrodynamic torque converter until the reaction torque becomes zero. This marks the starting point of a second phase of operation, characterized by the fact that the reactor (guide wheel) is released from its housing by means of a freewheel. Due to the free revolving reactor, it no longer takes up any reaction torque. Therefore, the trilok-converter operates in the second phase as a hydrodynamic clutch and avoids the decreasing section of the efficiency parabola of a torque converter. Moreover, the name for this type of converter is derived from the Trilok Consortium (Spannhake, Kluge and van Sanden), which has developed in 1928.

Furthermore for example, the U.S. version of Wikipedia (also included in Appendix A) provides at the end of the first paragraph on page 2, as follows: the classic torque converter design dictates that the stator (guide wheel) be prevented from rotating under any conditions, hence the term stator, and, in practice, however, the stator is mounted on an overrunning clutch, which prevents the stator from counter-rotating with respect to the prime mover but allows forward rotation. Moreover, the section titled "operational phases" on page 2 (see "coupling") and also the second paragraph of page 3, clarify that the term "torque converter" in the U.S. includes torque converters with a fixed guide

wheel but it is usually used to refer to a torque converter with a freewheeling guide wheel.

Therefore, Applicant respectfully submits that “torque converter” includes the “hydrodynamic Fottinger converter” and “TRILOK converter” described in the present application. Thus, claims 11-20 are definite.

The claimed drive train including the torque converter does not need an active control (closed loop) to achieve a constant speed of rotation on the output side to drive the electric generator (please refer to paragraphs [0056]-[0058] of the present application). Therefore, it is possible to avoid components, which have to be constantly adjusted and therefore increase the risk of failure of the drive train. Furthermore, the claimed invention allows a much faster reaction in case of variable wind conditions so that the mechanical load on the structural components, in case of the occurrence of gusts, decreases that improves the lifetime of a wind power plant.

The self-control characteristic is based on the fact that the claimed drive train can include a momentum versus speed characteristic, which resembles the parabolic characteristic of a wind rotor. This “internal parabolic” is achieved by the use of the torque converter to combine the power branches after the power-split transmission. Under partial load conditions, the torque converter can operate with an essentially constant setting of the reaction member. In that respect, please also refer to Figure 4 that shows the constant setting of the reaction member for a wide rotational speed range of a wind rotor connected to the claimed drive train.

Reconsideration and withdrawal of the rejection to claims 11-20 are respectfully requested.

In view of the above, it is respectfully submitted that the present

application is in condition for issuance. Such action is solicited.

If for any reason the Examiner feels that consultation with Applicant's attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

Respectfully submitted,

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Charles N. J. Ruggiero
Reg. No. 28,468
Attorney for Applicant
Ohlandt, Greeley, Ruggiero & Perle, LLP
One Landmark Square, 10th Floor
Stamford, CT 06901-2682
Tel: (203) 327-4500
Fax: (203) 327-6401